## March 2006 Shutdown

"Violating the second law of thermodynamics"
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Fermilab
2/20/06

## Goals

#### Complete Run IIb Upgrades

- TDCs
- XFT stereo
- Hardware Event Builder

#### Maintenance and Repair

- Solenoid
- Detectors
- Infrastructure (cooling systems)

#### **New Initiatives**

- Consumer Server Logger
- Diamond beam monitors

Hypocratic Oath Applies to CDF
Anticipate no extended access for 2 years
Plan to keep your area clean
Dervin is not your mother!

# Important Dates

Date		
2/27	Shutdown begins	
3/3	Open Collision Hall, begin detector work	
3/6 - 6/1	No Owl shifts (Cryo: 3/6 - 5/22): HV off at night!	
3/7 - 4/6	No Hardware Event Builder	
3/15 - 3/29	Hilman roller replacement (NW IMU steel)	
3/15	Chambers off flammable gas	
3/18	8 hour power outage to B0 and trailers	
3/24 - 4/19	Solenoid bore access(?)	
4/3	1/2 hour site wide power outage	
4/24	1/2 hour site wide power outage	
5/I	Flammable gas to COT (test recirc. system)	
5/12	Restrict access to collision hall	
5/12 - 5/25	Cosmic rays, Calibration and debugging	
5/25	Tevatron Cold	

Shutdown details: http://ncdf67.fnal.gov/~tesarek/shutdown06

### 1st Week

Goal: Characterize the detector using calibrations and cosmic ray data.

Long cosmic ray runs (2 shifts minimum/run)
Use as reference for end of shutdown comparisons

#### Work in hall

2/27 - 3/1 (Mon-Wed)

- Restricted collision hall access
- Remove top steel from low beta quads
- Survey "As Found" low beta quads

3/2 - 3/3 (Thu - Fri)

- Open hall for general access
- Open IMU steel
- Remove S.W. SVX CAEN mainframe for repair
- Begin CMP work

# Shutdown on I page

Dates	Planned work	Consequences
3/2 - 3/3	COT HV modifications	No COT HV
3/3 - 3/5	Plug and wall source calib	Evenings, restricted access in hall
3/3 - 4/14	CAEN HV repair/rehab. (Feynman)	No HV to CLC,CPR,TOF, plug
3/3 - 3/20	Calorimeter TDC upgrade	No EM/HAD timing readout
3/6 - 3/14	Motor Generator rehab.	No Central Detector Readout
3/7 - 3/18	Control room rack work	Limited use of monitors
3/7 - 3/23	Add VRB crates	No Hardware EVB
3/7 - 5/7	CMP walls out	Limited access to FIB/CMP
3/15 - 3/29	NW IMU Hilman replacement	No access to west hall
3/15 - 4/25	COT recirc. system upgrade	No Flammable gas to coll. hall
3/18-3/19	8 hour power outage	No Detector power
3/21 - 4/11	XTC reprogramming	No COT TDC readout
4/5 - 4/26	Plugs open	Restricted access to miniskirts
4/28	Flammable gas to COT	COT recirculating gas tests
5/12	Flammable gas to Muon systems	Begin Muon/Cosmic ray tests
5/12	Begin Repair Only Phase	Restrict access to CDF
6/5	Tevatron Startup	No access to CDF

# Detector Configurations

2/27 - 3/3:

Restricted access to hall

3/6 - 5/25:

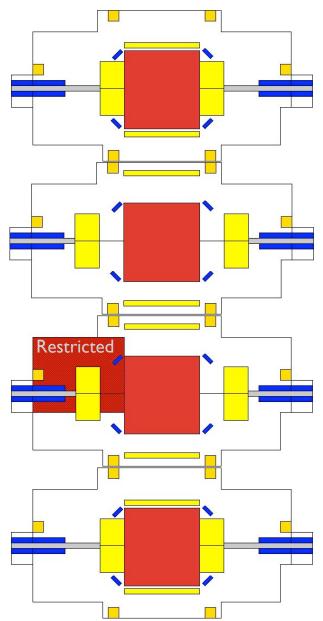
CDF largely open
Minor access restrictions
CMX arches moved as needed

3/15 - 3/29:

Restricted access to west hall

5/25 - 6/2:

Restricted access to CDF Detector closed



# Reassembling CDF

5/12 Begin restricted access to collision hall

- Repair Only.
- Nightly detector checks, Calibrations, Cosmics,
- L2 torture.

5/25 Finish surveys, move CMP walls in\* 5/25 Tev cold (controlled access to hall)\* 6/2 End of shutdown/Startup\*

\* Dates subject to change

# SPL Charge

#### Check schedule:

- Time conflicts (will you be away?)
- Resources (technicians, students, tools, fixtures, infrastructure?)

### Recovery Plans:

- Evaluation plots using cosmic rays/calibration
- Spare module/parts list

## We have time to be careful. Let's finish with no problems!

Details at: http://ncdf67.fnal.gov/~tesarek/shutdown06